



Australian Bureau of Statistics

6291.0.55.001 - Labour Force, Australia, Detailed - Electronic Delivery, Feb 2017

Previous ISSUE Released at 11:30 AM (CANBERRA TIME) 23/03/2017

Summary

Main Features

Data from the monthly Labour Force Survey are released in two stages. The Labour Force, Australia, Detailed - Electronic Delivery (cat. no. 6291.0.55.001) and Labour Force, Australia, Detailed, Quarterly (cat. no. 6291.0.55.003) are part of the second release, and include detailed data not contained in the Labour Force, Australia (cat. no. 6202.0) product set, which is released one week earlier.

The Labour Force, Australia, Detailed - Electronic Delivery (cat. no. 6291.0.55.001) is released monthly. Labour Force, Australia, Detailed, Quarterly (cat. no. 6291.0.55.003) includes data only collected in February, May, August and November (including industry and occupation).

Since these products are based on the same data as the Labour Force, Australia (cat. no. 6202.0) publication, the 6202.0 Labour Force, Australia Explanatory Notes are relevant to both releases.

Starting with the August 2016 issue of Labour Force, Australia, Detailed - Electronic Delivery (cat. no. 6291.0.55.001) the ABS has published detailed Labour Force data in pivot table format, in addition to the existing suite of SuperTable data cube outputs. SuperTable data cube outputs will be discontinued after the July 2017 issue.

Labour Force Pivot Tables

LABOUR FORCE PIVOT TABLES

Commencing with the August 2016 issue of Labour Force, Australia, Detailed - Electronic Delivery (cat. no. 6291.0.55.001) and the November 2016 issue of Labour Force, Australia, Detailed, Quarterly (cat. no. 6291.0.55.003), the ABS is now publishing detailed Labour Force data in pivot table format, in addition to the existing suite of SuperTable data cube outputs.

Pivot tables will increase the accessibility of Labour Force data, as well as provide a long term replacement for the unsupported Summary Record Database (SRD) format. The pivot table products reflect the design and utility of the existing Summary Record Database (SRD) data cubes as closely as possible. In addition, the inclusion of a comma separated variable (CSV) source worksheet in each pivot table is expected to be of particular interest to people

who undertake statistical analysis using a range of software.

The ABS will continue to release the SRD data cubes until July 2017 for monthly data and August 2017 for quarterly data, to allow for a transition to pivot tables, after which point the ABS intends to cease publishing Labour Force SRD data cubes.

A similar transition for the GM1 data cube in Labour Force, Australia (cat. no. 6202.0) will also commence, most likely in 2017.

Insights from the Original Data

INSIGHTS FROM THE ORIGINAL DATA

SAMPLE COMPOSITION

The Labour Force Survey sample can be thought of as comprising eight sub-samples (or rotation groups), with each sub-sample remaining in the survey for eight months, and one rotation group "rotating out" each month and being replaced by a new group "rotating in". This sample rotation is important in ensuring that seven-eighths of the sample are common from one month to the next, to ensure that changes in the estimates reflect real changes in the labour market, rather than the sample. In addition, the replacement sample is generally selected from the same geographic areas as the outgoing one, as part of a representative sampling approach.

When considering movements in the original estimates, it is possible to decompose the sample into three components:

- the matched common sample (survey respondents who responded in both January and February);
- the unmatched common sample (respondents in February but who did not respond in January, or vice versa); and
- the incoming rotation group (who replaced respondents who rotated out in January).

The detailed decomposition of each of these movements is included in the data cube 'Insights From the Original Data'.

In considering the three components of the sample, it is important to remember that the matched common sample describes the change observed for the same respondents January and February, while the other two components reflect differences between the aggregate labour force status of different groups of people.

While the rotation groups are designed to be representative of the population, the outgoing and incoming rotation groups will almost always have somewhat different characteristics, as a result of the groups representing a sample of different households and people. The design of the survey, including the weighting and estimation processes, ensures that these differences are generally relatively minor and seeks to ensure that differences in characteristics of rotation groups do not affect the representativeness of the survey and its estimates. Monthly estimates are always designed to be representative of their respective months, regardless of the relative contribution of the three components of the sample.

INCOMING ROTATION GROUP

In original terms, the incoming rotation group in February 2017 had a higher employment to population ratio than the group it replaced (61.8 per cent in January 2017, up to 62.9 per cent in February 2017), and was higher than the ratio for the entire sample (61.0 per cent). Its full-time employment to population ratio was higher than the group it replaced (41.6 per cent in January 2017, up to 43.2 per cent in February 2017), and higher than the ratio for the entire sample (41.8 per cent).

Its unemployment rate was above that of the sample as a whole (6.7 per cent, compared to 6.4 per cent) and its participation rate was also above it (67.4 per cent, compared to 65.2 per cent).

The incoming rotation group also had a reduced share of the population (12.1 per cent, down from 12.5 per cent for the group it replaced). This population share for this group was below the average share for the other seven rotation groups, which is not uncommon.

OUTGOING ROTATION GROUP

In looking ahead to the March 2017 estimates, the outgoing rotation group in February 2017, which will be replaced by a new incoming rotation group in March 2017, had a lower employment to population ratio (60.7 per cent in February 2017) compared to the sample as a whole (61.0 per cent in February 2017). The full-time to population ratio (42.0 per cent) was higher than the ratio for the entire sample (41.8 per cent).

In original terms, the unemployment rate for the outgoing rotation group in February 2017 was 5.1 per cent, which was lower than the 6.4 per cent for the whole sample. The participation rate for the outgoing rotation group in February 2017 was 64.0 per cent, also lower than the rate for the whole sample (65.2 per cent).

THE IMPORTANCE OF TREND DATA

As the gross flows and rotation group data are presented in original terms they are not directly comparable to the seasonally adjusted and trend data discussed elsewhere in the commentary, and are included to provide additional information for the original data. Since the original data are unadjusted, they have a considerable level of inherent sampling variability, which is specifically adjusted for in the trend series. The trend data provide the best measure of the underlying behaviour of the labour market and are the focus of the commentary in this publication.

Changes to Filter Lengths used in Labour Statistics

CHANGES TO FILTER LENGTHS USED IN LABOUR STATISTICS

INTRODUCTION

As part of ongoing continuous improvement, the ABS has completed a review, highlighted in the January 2017 issue, into the length of seasonal filters used in the Labour Force series.

This review determined that changes to the lengths of seasonal filters for specific seasonally adjusted series will provide more stable seasonal factors and reduce the average size of revisions through the concurrent seasonal adjustment and trend estimation process.

The ABS will change seasonal adjustment filter lengths as part of its annual seasonal re-analysis, which will result in one-off minor revisions throughout the time series in the March 2017 estimates (which will be published on 20 April 2017).

WHAT ARE SEASONAL ADJUSTMENT FILTERS AND WHY ARE THEIR LENGTHS IMPORTANT?

Seasonal filters are used as part of the seasonal adjustment process to measure and account for seasonal patterns in data. Filters set the parameters under which seasonal patterns are identified and measured. Once measured, these seasonal patterns are described as “seasonal factors”. The choice of seasonal adjustment filter is important, to ensure they most effectively identify the seasonal patterns arising in the data.

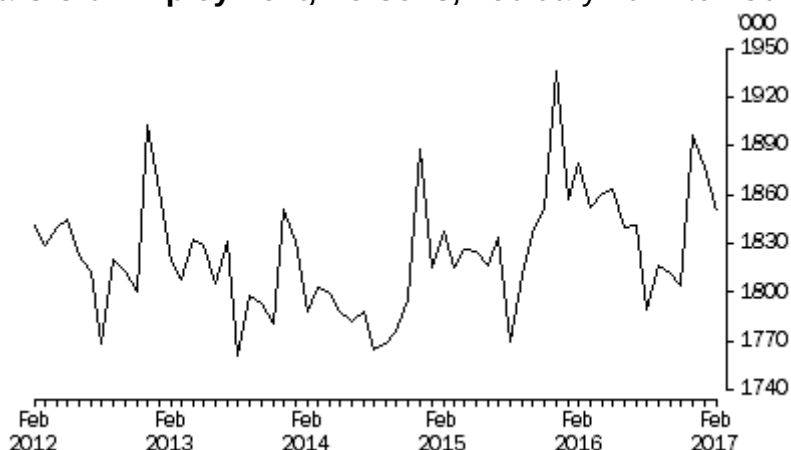
There are two important questions that need to be considered for each series:

I. What are the identifiable seasonal patterns?

II. How far into the past and into the future should we look to best estimate the seasonal patterns?

The answer to the first question is relatively straight forward. All Labour Force series show some seasonal patterns throughout the year, though this varies from series to series. The most obvious is around the Christmas period, from November through to February. There are also a range of effects related to seasonal climate and weather patterns, other cultural events and annual milestones, such as leaving school. These seasonal influences are generally visible in the 'Original' estimates and in the following chart, for example:

15-24 Years Old Employment, Persons, February 2012 to February 2017



The answer to the second question stems from the first. Having identified the regular patterns, over what time period should the seasonal factors be estimated?

Where a series has a high degree of irregularity and the underlying seasonal pattern is less pronounced, a longer seasonal filter is recommended. This is because longer filters will calculate a weighted average over a longer period of time, making them less susceptible to influence by one-off irregularities. Conversely, when a seasonal pattern is very strong and

stable, a shorter filter is more acceptable, as it is possible to see and explain the effect over a shorter period.

Once a filter length is set, it determines how quickly seasonal factors change reflecting changes in seasonal patterns. Shorter filters will more readily react to recent information, at the risk of including random variability and noise. Longer filters observe patterns over a longer time and will adjust more slowly to systemic changes resulting in changing seasonal patterns.

WHY IS THE ABS CHANGING THEM?

According to international best practice, filter lengths are chosen to provide the highest quality seasonal adjustment for that series - mainly focused on reducing the average size of revisions. Until now, the ABS has generally used filters considered mid-length, set as the default across Labour Force time series since the beginning of the monthly series in 1978. This reflects a design principle dating back to the introduction of seasonal adjustment, which was focused on consistency between different series, rather than optimising the approach for each series.

However, recent research has shown that there are no significant benefits from consistent filter lengths across series, and that it is less important than the objective of reducing revisions within seasonally adjusted estimates. The ABS has explored using longer filter lengths on some of its more volatile original series, and confirmed that, for some series, adopting a longer seasonal filter would reduce the average size of revisions.

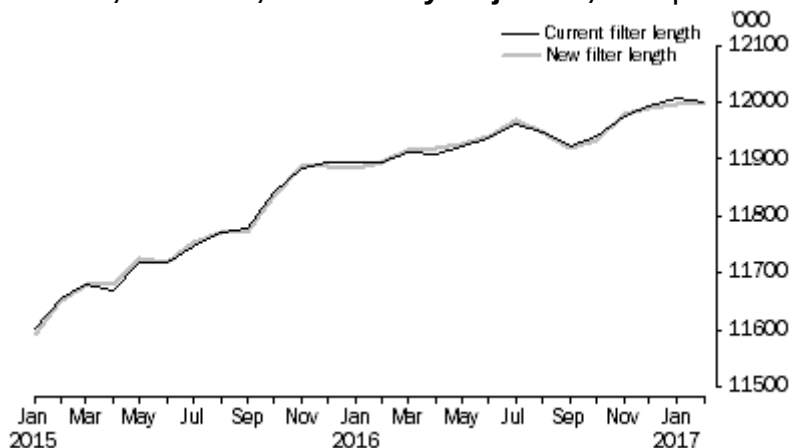
A list of series for which their filter length has been changed will be included in the March issue, on 20 April 2017. This list will also reference the quarterly series, which will have filter length changes applied with the release of May 2017 data.

WHAT ARE THE SIZE OF REVISIONS?

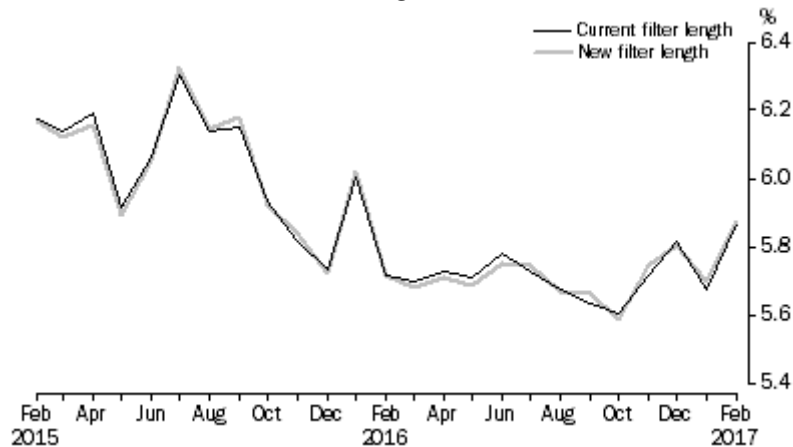
Changing the filter length of a series will only result in small revisions throughout the entire time series. Small revisions occur each month, as part of the concurrent adjustment process, with the changes to filter lengths resulting in slightly larger (though still small) revisions than are usually observed, as a one-off.

The below graphs provide an illustration of the effect of revisions.

Employed, Australia, Persons, Seasonally Adjusted, Comparison of filter lengths



Unemployment Rates, Australia, Persons, Seasonally Adjusted, Comparison of filter lengths



FOR MORE INFORMATION

For more information on time series analysis and seasonal adjustment, please see the following references:

Time Series Analysis Frequently Asked Questions, 2003 (cat. no. 1346.0.55.002)

Time Series Analysis: The Process of Seasonal Adjustment

Research Paper: Automated ARIMA Model Selection for Aiding Filter-Based Seasonal Adjustment (Methodology Advisory Committee), Jun 2012 (cat. no. 1352.0.55.124)

Article Archive

This section provides an archive of articles and analysis published in Labour Force, Australia (cat. no. 6202.0) and Labour Force, Australia, Detailed - Electronic Delivery (cat. no. 6291.0.55.001), promoting the effective use of labour force statistics. Articles are sorted by publication date.

Articles on labour related topics are also available in Australian Labour Market Statistics (cat. no. 6105.0) and Australian Social Trends (cat. no. 4102.0).

LABOUR FORCE SURVEY ARCHIVE

2016

Spotlight on Underemployment (*November*)

Labour Force Pivot Tables (*September*)

What's New In The Labour Force (*August*)

Advice on Reporting Regional Labour Force Data (*July*)

What's New in the Labour Force (*July*)

Revisions to Monthly hours worked in all jobs (*July*)

Annual Seasonal Re-analysis (*March*)

Online Collection in the Labour Force Survey (*February*)

What's New in the Labour Force (*February*)

What's New in the Labour Force (*January*)

2015

What's New in the Labour Force (*December*)

Measures of Underemployment and Underutilisation (*November*)

Update on Recommendation 7 from the Independent Technical Review (*November*)

What's New in the Labour Force (*November*)

What's New in the Labour Force (*October*)

What's New in the Labour Force (*September*)

Online Collection in the Labour Force Survey (*August*)

What's New in the Labour Force (*July*)

Progress with recommendations from the Independent Technical Review (*July*)

Assessing Volatility in the Labour Force Series (*June*)

What's New in the Labour Force (*June*)

Update on Recommendations 10 and 11 from the Independent Technical Review (*June*)

What's New in the Labour Force (*May*)

Update on Recommendation 7 from the Independent Technical Review (*May*)

What's New in the Labour Force (*April*)

What's New in the Labour Force (*March*)

Annual Seasonal Reanalysis (*March*)

Update on Recommendations from the Independent Technical Review (*March*)

What's new in the Labour Force (*February*)

Online Collection in the Labour Force Survey (*February*)

Rebenchmarking Labour Force Estimates (*February*)

What's new in the Labour force (*January*)

2014

What's new in the Labour force (*December*)

Independent Technical Review into the Labour Force Survey and ABS Response
(*November*)

What's new in the Labour force (*November*)

Removing the effect of Supplementary Surveys from seasonally adjusted estimates
(*October*)

Changes in this and upcoming labour force issues (*September*)

Changes in this and upcoming labour force issues (*August*)

What's new in the Labour force (*July*)

What's new in the Labour force (*June*)

What's new in the Labour force (*May*)

What's new in the Labour force (*February*)

Rebenchmarking Labour Force Estimates to the 2011 Census of Population and Housing
(*January*)

2013

What's new in the Labour force (*December*)

Understanding the Australian Labour Force using ABS statistics (*December*)

What's new in the Labour Force (*November*)

Understanding full-time/part-time status in the Labour Force Survey (*September*)

What's new in the Labour Force (*September*)

Fact sheet did you know - Underemployment (*June*)

What's new in the Labour Force (*June*)

New Labour Force Sample Design (*May*)

Annual Seasonal Reanalysis (*May*)

What's new in Labour Force (*May*)

Transition to online collection of the Labour Force Survey (*April*)

What's new in Labour Force (*April*)
Estimating Jobs in the Australian Labour Market (*February*)
Forthcoming improvements to the content of the Labour Force and Labour Supplementary Surveys (*January*)
What's new in Labour Force (*January*)
Understanding the Australian Labour Force using ABS statistics (*January*)

2012

Rebenchmarking of Labour Force Series (*November*)
Upcoming changes to the Labour Force Survey (*July*)
Labour Household Surveys content review and the Labour Force Survey (*June*)
Employment and mining in Queensland, New South Wales and Western Australia (*May*)
ABS Response to recent concerns expressed about employment estimates (*April*)
Population Benchmarks and Labour Force Survey (*April*)
Annual Seasonal Reanalysis (*March*)
Exploring Labour Force Data on joblessness (*February*)
Employment level estimates versus employment to population explained (*January*)

2011

Understanding the Australian Labour Force using ABS statistics (*November*)
Historical Revisions (*February*)
Impact of the floods on the Labour Force Survey (*January*)

About this Release

A range of Excel spreadsheets, pivot tables, and SuperTABLE datacubes. SuperTABLE data cubes will be discontinued after the July 2017 release. The monthly spreadsheets contain broad level data covering all the major items of the Labour Force Survey in time series format, including seasonally adjusted and trend estimates. The monthly datacubes and pivot tables contain more detailed and cross classified original data than the spreadsheets.

Explanatory Notes

Explanatory Notes

Data from the monthly Labour Force Survey are released in two stages. The Labour Force, Australia, Detailed - Electronic Delivery (cat. no. 6291.0.55.001) and Labour Force, Australia, Detailed, Quarterly (cat. no. 6291.0.55.003) are part of the second release, and include detailed data not contained in the Labour Force, Australia (cat. no. 6202.0) product set, which is released one week earlier.

The Labour Force, Australia, Detailed - Electronic Delivery (cat. no. 6291.0.55.001) is released monthly. Labour Force, Australia, Detailed, Quarterly (cat. no. 6291.0.55.003) includes data only collected in February, May, August and November (including industry and occupation).

Since these products are based on the same data as the Labour Force, Australia (cat. no. 6202.0) publication, the 6202.0 Labour Force, Australia Explanatory Notes are relevant to

both releases.

Quality Declaration - Summary

QUALITY DECLARATION - SUMMARY

INSTITUTIONAL ENVIRONMENT

Labour Force statistics are compiled from the Labour Force Survey which is conducted each month throughout Australia as part of the Australian Bureau of Statistics (ABS) household survey program. For information on the institutional environment of the Australian Bureau of Statistics (ABS), including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.

RELEVANCE

The Labour Force Survey provides monthly information about the labour market activity of Australia's resident civilian population aged 15 years and over. The Labour Force Survey is designed to primarily provide estimates of employment and unemployment for the whole of Australia and, secondarily, for each state and territory.

TIMELINESS

The Labour Force Survey enumeration begins on the Sunday between the 5th and 11th of the month, except for the Christmas and New Year holiday period. In December enumerations starts between the 3rd and 9th (4 weeks after November enumeration begins). In January enumeration starts between the 7th and 13th (5 weeks after December enumeration begins).

Key estimates from the Labour Force Survey are published in two stages. The first, *Labour Force, Australia* (cat. no. 6202.0), is released 39 days after the commencement of enumeration for the month, with the exception of estimates for December which are published 46 days after the commencement of enumeration.

The second stage includes detailed data that were not part of the first stage and are published in *Labour Force, Australia, Detailed - Electronic Delivery* (cat. no. 6291.0.55.001) and *Labour Force, Australia, Detailed, Quarterly* (cat. no. 6291.0.55.003). The second stage is released 7 days after the first stage.

ACCURACY

The Labour Force Survey is based on a sample of private dwellings (approximately 26,000 houses, flats etc) and non-private dwellings, such as hotels and motels. The sample covers about 0.32% of the Australian civilian population aged 15 years or over. The Labour Force Survey is designed primarily to provide estimates of key labour force statistics for the whole of Australia and, secondarily, for each state and territory.

Two types of error are possible in an estimate based on a sample survey: non-sampling error and sampling error.

Non-sampling error arises from inaccuracies in collecting, recording and processing the data. Every effort is made to minimise reporting error by the careful design of questionnaires, intensive training and supervision of interviewers, and efficient data processing procedures. Non-sampling error also arises because information cannot be obtained from all persons selected in the survey. The Labour Force Survey receives a high level of cooperation, with an average response rate for the last year being 93%.

Sampling error occurs because a sample, rather than the entire population, is surveyed. One measure of the likely difference resulting from not including all dwellings in the survey is given by the standard error. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained if all dwellings had been included in the survey, and about nineteen chances in twenty that the difference will be less than two standard errors.

Standard errors of key estimates and movements since the previous month are available in *Labour Force, Australia* (cat. no. 6202.0). The standard error of other estimates and movements may be calculated by using the spreadsheet contained in *Labour Force Survey Standard Errors, Data Cube* (cat. no. 6298.0.55.001).

COHERENCE

The ABS has been conducting the Labour Force Survey each month since February 1978. While seeking to provide a high degree of consistency and comparability over time by minimising changes to the survey, sound survey practice requires careful and continuing maintenance and development to maintain the integrity of the data and the efficiency of the collection.

The changes which have been made to the Labour Force Survey have included changes in sampling methods, estimation methods, concepts, data item definitions, classifications, and time series analysis techniques. In introducing these changes the ABS has generally revised previous estimates to ensure consistency and coherence with current estimates. For a full list of changes made to the Labour Force Survey see Chapter 20 in *Labour Statistics: Concepts, Sources and Methods* (cat. no. 6102.0.55.001).

INTERPRETABILITY

The ABS has been conducting the Labour Force Survey each month since February 1978. While seeking to provide a high degree of consistency and comparability over time by minimising changes to the survey, sound survey practice requires careful and continuing maintenance and development to maintain the integrity of the data and the efficiency of the collection.

The changes which have been made to the Labour Force Survey have included changes in sampling methods, estimation methods, concepts, data item definitions, classifications, and time series analysis techniques. In introducing these changes the ABS has generally revised previous estimates to ensure consistency and coherence with current estimates. For a full list of changes made to the Labour Force Survey see Chapter 20 in *Labour Statistics: Concepts, Sources and Methods* (cat. no. 6102.0.55.001).

ACCESSIBILITY

Please see the Related Information tab for the list of products that are available from this collection.

Time Series Spreadsheet (I-Note) - Time Series Spreadsheet

For advice on reporting data from this product, please refer to: Advice on reporting regional labour force data.

Due to the flooding in Queensland in January 2011, the relative standard errors for January 2011 will vary across regions and will be higher than normal in some regions. The RSEs for the Darling Downs-South West and Ipswich City Statistical Regions are expected to be approximately 50% higher, while the RSEs for the Brisbane City Inner Ring Statistical Region will increase by approximately 25%. The Brisbane City Outer Ring, West Moreton and Mackay-Fitzroy-Central West Statistical Regions will have RSEs approximately 10% higher. All other regions have minimal differences. However from February 2011, the data returns to normal. Refer to the article Impact of the floods on the Labour Force Survey in January 2011 for more information.

The new labour force sample was phased-in over four months from May to August 2013. See the article on page 10 of the May 2013 issue of Labour Force, Australia (cat. no. 6202.0) for more information. During phase in of the new sample, standard errors associated with key labour force data were expected to increase by approximately 10% at a national level, however increased standard errors and variability in the estimates may be more evident in detailed regional data during this time.

Time Series Spreadsheet (I-Note) - Time Series Spreadsheet

For advice on reporting data from this product, please refer to: Advice on reporting regional labour force data.

Due to the flooding in Queensland in January 2011, the relative standard errors for January 2011 will vary across regions and will be higher than normal in some regions. The RSEs for the Darling Downs-South West and Ipswich City Statistical Regions are expected to be approximately 50% higher, while the RSEs for the Brisbane City Inner Ring Statistical Region will increase by approximately 25%. The Brisbane City Outer Ring, West Moreton and Mackay-Fitzroy-Central West Statistical Regions will have RSEs approximately 10% higher. All other regions have minimal differences. However from February 2011, the data returns to normal. Refer to the article Impact of the floods on the Labour Force Survey in January 2011 for more information.

The new labour force sample was phased-in over four months from May to August 2013. See the article on page 10 of the May 2013 issue of Labour Force, Australia (cat. no. 6202.0) for more information. During phase in of the new sample, standard errors

associated with key labour force data were expected to increase by approximately 10% at a national level, however increased standard errors and variability in the estimates may be more evident in detailed regional data during this time.

Data Cubes (I-Note) - Data Cubes

For advice on reporting data from this product, please refer to: Advice on reporting regional labour force data.

Due to the flooding in Queensland in January 2011, the relative standard errors for January 2011 will vary across regions and will be higher than normal in some regions. The RSEs for the Darling Downs-South West and Ipswich City Statistical Regions are expected to be approximately 50% higher, while the RSEs for the Brisbane City Inner Ring Statistical Region will increase by approximately 25%. The Brisbane City Outer Ring, West Moreton and Mackay-Fitzroy-Central West Statistical Regions will have RSEs approximately 10% higher. All other regions have minimal differences. However from February 2011, the data returns to normal. Refer to the article Impact of the floods on the Labour Force Survey in January 2011 for more information.

The new labour force sample was phased-in over four months from May to August 2013. See the article on page 10 of the May 2013 issue of Labour Force, Australia (cat. no. 6202.0) for more information. During phase in of the new sample, standard errors associated with key labour force data were expected to increase by approximately 10% at a national level, however increased standard errors and variability in the estimates may be more evident in detailed regional data during this time.

Data Cubes (I-Note) - Data Cubes

For advice on reporting data from this product, please refer to: Advice on reporting regional labour force data.

Due to the flooding in Queensland in January 2011, the relative standard errors for January 2011 will vary across regions and will be higher than normal in some regions. The RSEs for the Darling Downs-South West and Ipswich City Statistical Regions are expected to be approximately 50% higher, while the RSEs for the Brisbane City Inner Ring Statistical Region will increase by approximately 25%. The Brisbane City Outer Ring, West Moreton and Mackay-Fitzroy-Central West Statistical Regions will have RSEs approximately 10% higher. All other regions have minimal differences. However from February 2011, the data returns to normal. Refer to the article Impact of the floods on the Labour Force Survey in January 2011 for more information.

The new labour force sample was phased-in over four months from May to August 2013. See the article on page 10 of the May 2013 issue of Labour Force, Australia (cat. no. 6202.0) for more information. During phase in of the new sample, standard errors associated with key labour force data were expected to increase by approximately 10% at a national level, however increased standard errors and variability in the estimates may be more evident in detailed regional data during this time.

Standard Errors

Estimates from the Labour Force Survey (LFS) are based on information collected from people in a sample of dwellings, rather than the entire population. Hence the estimates produced may differ from those that would have been produced if the entire population had been included in the survey. The most common measure of the likely difference (or 'sampling error') is the standard error (SE).

The ABS considers that estimates with a relative standard error of 25% or more may be subject to sampling variability too high for most practical purposes.

To indicate those cells in spreadsheets with a relative standard error of 25% or more, annotations have been applied prior to dissemination.

In addition, the tables below have been supplied to show estimates at which the relative standard error is 25%. Estimates of the size indicated in the tables, or smaller, are considered to be subject to sampling variability too high for most practical purposes.

Due to the January 2011 flooding in Queensland the relative standard errors for January 2011 will be higher than normal in some regions, therefore for Queensland the estimates at which the relative standard error is 25% will be higher than they appear in the tables below. However from February, the data returns to normal.

The new labour force sample was phased-in over four months from May to August 2013. During phase in of the new sample, standard errors associated with key labour force data were expected to increase by approximately 10% at a national level, however increased standard errors and variability in the estimates may be more evident in detailed regional data during this time.

The RSEs for July 2013 (50% old sample, 50% new sample) and onwards will be subject to revisions in the future, as more information is known about the new sample after it has been introduced.

Additional information on how standard errors for LFS estimates are produced is available in Labour Force Survey Standard Errors, Data Cube (cat. no. 6298.0.55.001).

State	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aust
Employed									
Feb-78 — Sep-82	4.5	4.5	3.5	2.5	2.5	1.5	1.8	2.0	4.5
Oct-82 — Aug-87	4.0	4.0	3.0	1.8	2.0	1.0	1.8	1.3	3.5
Sep-87 — Feb-89	4.5	4.5	3.0	2.0	2.5	1.3	1.8	1.5	4.0
Mar-89 — Aug-92	4.5	4.5	3.0	2.1	2.3	1.3	2.0	1.4	3.5
Sep-92 — Aug-97	5.3	4.6	3.5	2.4	2.9	1.3	1.3	1.0	4.0
Sep-97 — Sep-98	5.9	4.5	4.1	2.4	2.8	1.1	1.0	1.1	4.4
Oct-98 — Feb-03	5.9	3.1	3.7	2.5	2.2	1.1	1.3	0.9	5.5
Mar-03 — Oct-07	6.3	3.0	4.4	2.3	2.5	1.3	1.5	1.1	6.6
Nov-07	6.2	3.2	4.3	2.3	2.5	1.3	1.4	1.1	6.4
Dec-07	6.1	3.4	4.3	2.3	2.6	1.3	1.3	1.1	6.2
Jan-08	6.0	3.6	4.2	2.3	2.6	1.3	1.3	1.2	6.0
Feb-08	5.9	3.8	4.2	2.4	2.7	1.3	1.2	1.2	5.9
Mar-08	5.9	4.1	4.2	2.4	3.0	1.2	1.1	1.2	5.7
Apr-08	5.8	4.4	4.4	2.5	3.1	1.3	1.0	1.3	5.6
May-08	5.7	4.7	4.3	2.5	3.1	1.3	1.0	1.3	5.4
Jun-08	5.5	4.9	4.3	2.5	3.3	1.3	1.0	1.3	5.3
Jul-08 — Aug-09	6.9	6.1	5.3	3.1	4.0	1.5	1.2	1.6	7.4
Sep-09	6.5	5.8	5.0	2.9	3.8	1.5	1.1	1.5	7.0
Oct-09	6.1	5.5	4.7	2.8	3.6	1.4	1.0	1.4	6.5

Nov-09	5.8	5.2	4.5	2.6	3.4	1.3	1.0	1.4	6.2
Dec-09 — Jun-13	5.5	4.9	4.3	2.5	3.3	1.3	1.0	1.3	5.8
Jul-13 — Jan-14	7.7	3.8	5.5	2.7	3.8	1.4	0.3	1.7	7.8
Feb-14 onwards	7.9	3.9	5.6	2.7	3.8	1.4	0.3	1.7	7.9

Unemployed

Feb-78 — Sep-82	4.5	4.5	3.5	2.5	2.5	1.5	1.8	2.0	4.5
Oct-82 — Aug-87	4.0	4.0	3.0	1.8	2.0	1.0	1.8	1.3	3.5
Sep-87 — Feb-89	4.5	4.5	3.0	2.0	2.5	1.3	1.8	1.5	4.0
Mar-89 — Aug-92	4.5	4.5	3.0	2.1	2.3	1.3	2.0	1.4	3.5
Sep-92 — Aug-97	5.3	4.6	3.5	2.4	2.9	1.3	1.3	1.0	4.0
Sep-97 — Sep-98	5.9	4.5	4.1	2.4	2.8	1.1	1.0	1.1	4.4
Oct-98 — Feb-03	5.7	5.7	4.5	2.6	3.3	1.3	3.2	1.4	4.9
Mar-03 — Oct-07	6.0	5.4	4.9	2.9	3.6	1.6	2.2	1.6	5.2
Nov-07	6.1	5.4	5.0	2.9	3.7	1.6	2.1	1.7	5.2
Dec-07	6.2	5.5	5.0	2.9	3.8	1.7	1.9	1.7	5.2
Jan-08	6.3	5.6	5.0	3.0	4.0	1.7	1.8	1.8	5.2
Feb-08	6.4	5.7	5.1	3.0	4.1	1.7	1.7	1.8	5.1
Mar-08	6.7	5.7	5.2	3.1	4.5	1.8	1.6	1.9	5.1
Apr-08	6.8	5.9	5.5	3.2	4.6	1.9	1.5	1.9	5.2
May-08	6.9	6.0	5.5	3.3	4.8	1.9	1.4	2.0	5.1
Jun-08	7.1	6.1	5.6	3.3	5.0	1.9	1.4	2.1	5.1
Jul-08 — Aug-09	9.3	8.0	7.4	4.4	6.6	2.5	1.8	2.8	7.3
Sep-09	8.7	7.5	6.8	4.1	6.1	2.4	1.6	2.5	6.8
Oct-09	8.1	7.0	6.4	3.8	5.7	2.2	1.5	2.4	6.4
Nov-09	7.5	6.5	6.0	3.5	5.3	2.1	1.5	2.2	6.0
Dec-09 — Jun-13	7.1	6.1	5.6	3.3	5.0	1.9	1.4	2.1	5.7
Jul-13 — Jan-14	7.3	6.6	8.4	3.7	5.8	1.7	1.3	2.2	7.1
Feb-14 onwards	7.4	6.7	8.6	3.8	5.9	1.8	1.3	2.3	7.3

NILF

Feb-78 — Sep-82	4.5	4.5	3.5	2.5	2.5	1.5	1.8	2.0	4.5
Oct-82 — Aug-87	4.0	4.0	3.0	1.8	2.0	1.0	1.8	1.3	3.5
Sep-87 — Feb-89	4.5	4.5	3.0	2.0	2.5	1.3	1.8	1.5	4.0
Mar-89 — Aug-92	4.5	4.5	3.0	2.1	2.3	1.3	2.0	1.4	3.5
Sep-92 — Aug-97	5.3	4.6	3.5	2.4	2.9	1.3	1.3	1.0	4.0
Sep-97 — Sep-98	5.9	4.5	4.1	2.4	2.8	1.1	1.0	1.1	4.4
Oct-98 — Feb-03	6.4	3.7	4.1	3.2	2.7	1.2	1.4	1.1	6.0
Mar-03 — Oct-07	7.8	3.7	5.2	3.0	3.2	1.5	2.0	1.3	7.3
Nov-07	7.6	3.9	5.1	3.0	3.2	1.5	1.8	1.3	7.0
Dec-07	7.4	4.1	5.1	3.0	3.3	1.5	1.7	1.4	6.8
Jan-08	7.3	4.4	5.0	3.0	3.4	1.5	1.6	1.4	6.6
Feb-08	7.1	4.7	5.0	3.1	3.5	1.5	1.5	1.4	6.3
Mar-08	7.1	5.0	4.9	3.1	3.8	1.5	1.3	1.5	6.2
Apr-08	7.0	5.4	5.3	3.2	3.9	1.5	1.2	1.5	6.0
May-08	6.8	5.7	5.2	3.2	4.0	1.5	1.1	1.6	5.8
Jun-08	6.6	6.0	5.2	3.2	4.1	1.5	1.1	1.6	5.6
Jul-08 — Aug-09	8.3	7.6	6.5	4.0	5.2	1.8	1.4	2.0	8.0
Sep-09	7.8	7.2	6.1	3.7	4.9	1.7	1.3	1.9	7.4
Oct-09	7.3	6.7	5.8	3.5	4.6	1.6	1.2	1.8	6.9
Nov-09	6.9	6.4	5.4	3.3	4.4	1.6	1.2	1.7	6.5
Dec-09 — Jun-13	6.6	6.0	5.2	3.2	4.1	1.5	1.1	1.6	6.2
Jul-13 — Jan-14	8.4	4.4	9.8	3.6	4.5	1.8	0.7	2.5	9.0
Feb-14 onwards	8.5	4.5	9.9	3.7	4.6	1.8	0.8	2.5	9.1

Greater Capital City Statistical Areas

	Feb-78 — Sep-82	Oct-82 — Aug-87	Sep-87 — Feb-89	Mar-89 — Aug-92	Sep-92 — Aug-97	Sep-97 — Sep-98	Oct-98 — Feb-03
Greater Sydney	4.5	4.0	4.5	4.5	5.3	5.7	5.8
Rest of NSW	4.5	4.0	4.5	4.5	5.3	5.7	5.8
Greater Melbourne	4.5	4.0	4.5	4.5	4.6	4.6	3.3
Rest of Victoria	4.5	4.0	4.5	4.5	4.6	4.3	3.2
Greater Brisbane	3.5	3.0	3.0	3.0	3.5	3.7	3.4
Rest of Queensland	3.5	3.0	3.0	3.0	3.6	4.3	3.6
Greater Adelaide	2.5	1.8	2.0	2.1	2.4	2.4	2.7
Rest of South Australia	2.5	1.8	2.0	2.1	2.5	2.2	2.5
Greater Perth	2.5	2.0	2.5	2.3	2.9	2.6	2.3

Rest of Western Australia	2.5	2.0	2.5	2.3	2.9	2.8	2.2
Greater Hobart	1.5	1.0	1.3	1.3	1.3	1.1	0.9
Rest of Tasmania	1.5	1.0	1.3	1.3	1.3	1.1	1.1

Mar-03 — Mar-08 — Jul-08 — Nov-09 — Jul-13 — Feb -14
Feb-08 Jun-08 Oct-09 Jun-13 Jan-14 onwards

Greater Sydney	6.5	5.7	7.1	5.7	7.6	7.7	
Rest of NSW	6.4	5.6	7.0	5.6	7.5	7.6	
Greater Melbourne	3.2	5.1	6.4	5.1	4.0	4.0	
Rest of Victoria	3.1	5.0	6.3	5.0	3.9	3.9	
Greater Brisbane	4.1	4.0	5.0	4.0	5.9	6.0	
Rest of Queensland	4.4	4.3	5.4	4.3	6.3	6.4	
Greater Adelaide	2.5	2.7	3.4	2.7	3.0	3.0	
Rest of South Australia	2.4	2.5	3.1	2.5	2.8	2.8	
Greater Perth	2.6	3.5	4.3	3.5	3.9	4.0	
Rest of Western Australia	2.5	3.3	4.1	3.3	3.7	3.8	
Greater Hobart	1.1	1.1	1.4	1.1	1.3	1.3	
Rest of Tasmania	1.3	1.3	1.6	1.3	1.5	1.5	

Statistical Area Level 4 Regions **Oct-98 — Mar-03 — Mar-08 — Jul-08 — Nov-09 — Jul-13 — Feb-14**
Feb-03 Feb-08 Jun-08 Oct-09 Jun-13 Jan-14 onwards

Central Coast	7.4	8.5	7.2	9.4	7.2	10.2	10.4
Sydney - Baulkham Hills and Hawkesbury	7.2	8.3	7.0	9.2	7.0	10.0	10.2
Sydney - Blacktown	7.3	8.3	7.1	9.3	7.1	10.0	10.2
Sydney - City and Inner South	8.5	9.7	8.3	10.8	8.3	11.7	11.9
Sydney - Eastern Suburbs	9.6	11.0	9.3	12.2	9.3	13.1	13.4
Sydney - Inner South West	7.3	8.4	7.1	9.3	7.1	10.1	10.3
Sydney - Inner West	7.7	8.8	7.5	9.8	7.5	10.6	10.8
Sydney - North Sydney and Hornsby	7.6	8.6	7.3	9.6	7.3	10.4	10.6
Sydney - Northern Beaches	7.8	8.9	7.6	9.9	7.6	10.7	10.9
Sydney - Outer South West	7.3	8.4	7.1	9.3	7.1	10.1	10.3
Sydney - Outer West and Blue Mountains	7.3	8.3	7.1	9.3	7.1	10.0	10.2
Sydney - Parramatta	7.8	8.9	7.6	10.0	7.6	10.8	11.0
Sydney - Ryde	7.7	8.8	7.5	9.8	7.5	10.6	10.8
Sydney - South West	7.5	8.6	7.3	9.6	7.3	10.4	10.6
Sydney - Sutherland	7.4	8.4	7.2	9.4	7.2	10.1	10.3
Capital Region	7.2	8.2	7.0	9.2	7.0	9.9	10.1
Central West	7.6	8.7	7.4	9.7	7.4	10.5	10.7
Coffs Harbour - Grafton	7.6	8.7	7.4	9.7	7.4	10.5	10.7
Far West and Orana	7.4	8.4	7.2	9.4	7.2	10.1	10.3
Hunter Valley exc Newcastle	7.1	8.1	6.9	9.0	6.9	9.8	10.0
Illawarra	7.6	8.7	7.4	9.7	7.4	10.5	10.7
Mid North Coast	7.5	8.6	7.3	9.6	7.3	10.3	10.6
Murray	7.6	8.6	7.4	9.6	7.4	10.4	10.6
New England and North West	7.6	8.7	7.4	9.7	7.4	10.5	10.7
Newcastle and Lake Macquarie	7.1	8.1	6.9	9.0	6.9	9.8	9.9
Richmond - Tweed	7.6	8.7	7.4	9.7	7.4	10.5	10.7
Riverina	7.6	8.6	7.4	9.6	7.4	10.4	10.6
Southern Highlands and Shoalhaven	9.0	10.3	8.7	11.4	8.7	12.3	12.6
Melbourne - Inner	4.1	3.9	7.2	9.4	7.2	5.2	5.3
Melbourne - Inner East	3.6	3.4	6.2	8.2	6.2	4.5	4.6
Melbourne - Inner South	3.7	3.5	6.4	8.4	6.4	4.7	4.8
Melbourne - North East	3.8	3.6	6.6	8.6	6.6	4.8	4.9
Melbourne - North West	3.7	3.6	6.5	8.6	6.5	4.7	4.8
Melbourne - Outer East	3.8	3.6	6.6	8.7	6.6	4.8	4.9
Melbourne - South East	3.6	3.4	6.3	8.3	6.3	4.6	4.7
Melbourne - West	3.5	3.4	6.1	8.1	6.1	4.4	4.5
Mornington Peninsula	3.6	3.5	6.4	8.3	6.4	4.6	4.7
Ballarat	4.0	3.8	6.9	9.1	6.9	5.0	5.1
Bendigo	3.8	3.7	6.7	8.8	6.7	4.9	5.0
Geelong	3.7	3.5	6.5	8.5	6.5	4.7	4.8
Hume	4.3	4.1	7.4	9.7	7.4	5.4	5.5
Latrobe - Gippsland	4.1	3.9	7.2	9.4	7.2	5.2	5.3

North West	3.9	3.7	6.8	8.9	6.8	4.9	5.0
Shepparton	4.3	4.1	7.4	9.7	7.4	5.4	5.5
Warrnambool and South West	3.7	3.5	6.5	8.5	6.5	4.7	4.8
Brisbane - East	4.1	5.1	5.1	6.7	5.1	8.1	8.2
Brisbane - North	4.1	5.2	5.1	6.7	5.1	8.1	8.3
Brisbane - South	4.2	5.2	5.2	6.8	5.2	8.2	8.4
Brisbane - West	4.1	5.2	5.1	6.7	5.1	8.2	8.3
Brisbane Inner City	4.2	5.3	5.3	6.9	5.3	8.4	8.6
Ipswich	4.0	5.0	5.0	6.5	5.0	7.9	8.1
Logan - Beaudesert	4.3	5.4	5.3	7.0	5.3	8.4	8.6
Moreton Bay - North	3.9	4.9	4.8	6.4	4.8	7.7	7.9
Moreton Bay - South	3.9	4.9	4.8	6.3	4.8	7.7	7.9
Cairns	4.9	6.2	6.1	8.0	6.1	9.7	9.9
Darling Downs - Maranoa	4.6	5.8	5.7	7.5	5.7	9.1	9.3
Fitzroy	4.2	5.3	5.2	6.9	5.2	8.3	8.5
Gold Coast	4.3	5.5	5.4	7.1	5.4	8.6	8.7
Mackay	4.2	5.3	5.2	6.9	5.2	8.3	8.5
Queensland - Outback	4.7	5.9	5.8	7.6	5.8	9.2	9.4
Sunshine Coast	4.3	5.4	5.3	7.0	5.3	8.5	8.7
Toowoomba	4.6	5.8	5.7	7.5	5.7	9.0	9.2
Townsville	4.7	5.9	5.8	7.6	5.8	9.2	9.4
Wide Bay	4.6	5.8	5.7	7.5	5.7	9.0	9.2
Adelaide - Central and Hills	3.3	3.1	3.3	4.3	3.3	3.7	3.8
Adelaide - North	3.3	3.0	3.3	4.3	3.3	3.7	3.8
Adelaide - South	3.4	3.1	3.4	4.4	3.4	3.8	3.9
Adelaide - West	3.7	3.4	3.7	4.8	3.7	4.1	4.2
Barossa - Yorke - Mid North	3.5	3.2	3.5	4.5	3.5	3.9	4.0
South Australia - Outback	3.7	3.4	3.7	4.8	3.7	4.1	4.2
South Australia - South East	3.1	2.8	3.1	4.0	3.1	3.5	3.5
Mandurah	2.4	2.8	4.0	5.2	4.0	4.6	4.7
Perth - Inner	3.1	3.5	4.9	6.5	4.9	5.8	5.9
Perth - North East	2.9	3.3	4.6	6.1	4.6	5.4	5.5
Perth - North West	2.8	3.2	4.5	5.9	4.5	5.2	5.3
Perth - South East	2.9	3.3	4.7	6.1	4.7	5.5	5.6
Perth - South West	2.7	3.1	4.3	5.7	4.3	5.0	5.1
Bunbury	2.4	2.8	4.0	5.2	4.0	4.6	4.7
Western Australia - Outback	2.8	3.3	4.6	6.0	4.6	5.4	5.5
Western Australia - Wheat Belt	2.6	3.0	4.2	5.5	4.2	4.9	5.0
Greater Hobart	0.9	1.1	1.1	1.4	1.1	1.3	1.3
Launceston and North East	1.3	1.5	1.5	1.9	1.5	1.7	1.8
Tasmania - South East	1.6	1.9	1.9	2.4	1.9	2.2	2.2
Tasmania - West and North West	1.3	1.6	1.6	2.0	1.6	1.8	1.8
Darwin	1.4	1.7	1.0	1.3	1.0	0.9	0.9
Northern Territory - Outback	1.4	1.7	1.0	1.3	1.0	0.9	0.9

© Commonwealth of Australia

All data and other material produced by the Australian Bureau of Statistics (ABS) constitutes Commonwealth copyright administered by the ABS. The ABS reserves the right to set out the terms and conditions for the use of such material. Unless otherwise noted, all material on this website – except the ABS logo, the Commonwealth Coat of Arms, and any material protected by a trade mark – is licensed under a Creative Commons Attribution 2.5 Australia licence